

**REMARKS**

**Status of the Claims**

Claims 1-11 are pending in the application. In the present Amendment, claim 1 has been amended and new claim 11 has been added. Support for the amended and new claim can be found throughout the specification and the originally filed claims. Applicant has not introduced any new matter by the amendments.

**Rejections Under 35 U.S.C. § 103(a)**

Claims 1-10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bradley (US 6,550,347) in view of Hakalehto (WO 99/23243). Applicant respectfully traverses the rejection.

A *prima facie* case of obviousness has three distinct requirements. First, the references must teach or suggest every claim element. M.P.E.P. §§ 2142 and 2143.03. Second, there must be a motivation to modify or combine the teachings of the cited references. M.P.E.P. §§ 2143 and 2143.01. Third, there must be a reasonable expectation of success in performing the modified or combined teachings of the references. M.P.E.P. § 2143.02.

According to the Office, it would have been obvious to one of ordinary skill in the art to employ the culture medium of Hakalehto as an entrapment liquid in the device of Bradley. Official Action, page 3. As explained below, however, the references fail to provide either the motivation to combine the teachings or a reasonable expectation of success of the proposed modification.

The Federal Circuit has asserted that:

[t]he factual inquiry whether to combine references must be thorough and searching. It **must be based on objective**

**evidence of record . . . .** [T]he Board must not only assure that the requisite findings are made, based on evidence of record, but **must also explain the reasoning** by which the findings are deemed to support the agency's conclusion.

*See In re Lee*, 277 F.3d 1338, 1343-44 (Fed. Cir. 2002) (emphasis added). The Examiner has not demonstrated that the cited documents provide a suggestion to combine the references. Nothing in Bradley or Hakalehto suggests the use of culture media as an entrapment fluid in the Bradley device. There simply is no objective evidence motivating the proposed modification.

Bradley discloses a multi-particle detection system. Its device is designed to capture not only microorganisms, but also various additional air components. Accordingly, an entrapment fluid suitable for use in the Bradley device must be capable of being “used to capture gases or chemical or physical particles as well as microbes and pollen.” Bradley, column 6, lines 64-65.

Hakalehto discloses a syringe device for propagating microorganisms found on solid surfaces or in liquid samples. The plunger of the syringe is used to swab surfaces for microorganisms or a liquid sample containing potential microorganisms is drawn into a syringe containing culture media. Hakalehto basically discloses that culture media can be used to grow microorganisms. But nothing in the Hakalehto reference suggests using culture media as an entrapment fluid for the air sampler disclosed by Bradley.

That one skilled in the art could use culture media in the Bradley device does not answer the question of obviousness. The evidence must compel the conclusion that a person skilled in the art would actually have made the necessary modifications, not simply that the person could have done so or that doing so seems possible. *See In re*

*Mills*, 916 F.2d 680, 682 (Fed. Cir. 1990). Here, the skilled artisan would not have made the proposed modification.

The use of culture media as an entrapment fluid would significantly impair the ability to detect the non-microbial particulates (gases, pollens, etc.) the Bradley device was designed to capture. The components of liquid culture media would impede the subsequent assays for non-microbial particles, thereby destroying the multifunctional detection capabilities of the Bradley device. Moreover, the nature of the Bradley device renders the use of culture media as an entrapment fluid economically impractical. The Bradley device is designed to sample large volumes of air at high flow rates, so a large volume of entrapment fluid is required. Due to the high cost of culture media, detector substances and microbial selection agents, their use as an entrapment fluid in the Bradley device would be economically prohibitive.

Applicant respectfully submits that a *prima facie* case of obviousness has not been made because the documents fail to provide both the motivation to combine reference teachings and a reasonable expectation of success for the proposed modification. One skilled in the art simply would not have made the proposed modification. Accordingly, for at least the foregoing reasons, Applicant respectfully requests the withdrawal of this rejection.

## **Conclusions**

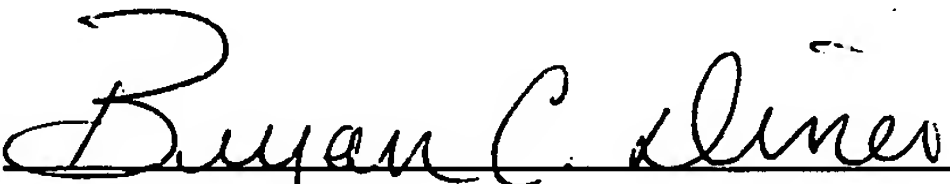
In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims. If the Examiner has any questions regarding this Amendment and Response, he is invited to contact the undersigned at 202-408-4116.

Please grant any extensions of time required to enter this response and charge  
any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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Dated: September 16, 2005

By:   
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